

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 November 2004 (18.11.2004)

PCT

(10) International Publication Number
WO 2004/098526 A3

(51) International Patent Classification⁷: **A61K 48/00**,
C12N 15/74

(21) International Application Number:
PCT/US2004/013756

(22) International Filing Date: 5 May 2004 (05.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/467,602 5 May 2003 (05.05.2003) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
19 May 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANTI-CANCER DNA VACCINE EMPLOYING PLASMIDS ENCODING SIGNAL SEQUENCE, MUTANT ONCO-PROTEIN ANTIGEN, AND HEAT SHOCK PROTEIN

(57) Abstract: Novel nucleic acid vectors comprising sequences encoding (a) an antigen, (b) a signal peptide, and (c) a heat shock protein, are disclosed, as are methods for using such vectors to induce antigen-specific immune responses and to treat tumors.

WO 2004/098526 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/13756

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 48/00; C12N 15/74

US CL : 514/44; 435/320.1

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 514/44; 435/320.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Sequence databases, EAST, MEDLINE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,235,523 (GAJEWCZYK ET AL) 22 MAY 2001, See abstract for example.	1-9, 11, 12, 15, 16, 18-20, 22-24, 26-29, 31-33, 35-37, 39, 40
Y	CHEN, W. ET AL: Modulatory effects of the human heat shock protein 70 on DNA vaccination. See e.g. the last sentence of the abstract.	1-9, 11, 12, 15, 16, 18-20, 22-24, 26-29, 31-33, 35-37, 39, 40
T --- A	US 6,734,173 B1 (WU ET AL) 11 MAY 2004 See for example claims 1-3 and SEQ ID Nos: 2, 9, 22.	1-9, 11, 12, 15, 16, 18-20, 22-24, 26-29, 31-33, 35-37, 39, 40 ----- 10, 13, 14, 17, 21, 25, 30, 34, 38

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Date of the actual completion of the international search

16 March 2005 (16.03.2005)

Date of mailing of the international search report

01 APR 2005

Name and mailing address of the ISA/US

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